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IN THE UNITED STATES PATENTAND DEMARK OFFICE

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Kanu Chadha and Manish Bhardwaj

Application No.:

10/713,562

Group Art Unit:

2661

Filed:

November 14, 2003

Examiner:

Not Assigned

Confirmation No.:

8238

Title:

Novel Receiver Architecture For Pilot Based OFDM Systems

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INFORMATION DISCLOSURE STATEMENT

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Sir

| stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, inclu CPA, or a Request for Continued Examination). [] under 37 CFR 1.97(c) together with either: [] a Statement under 37 CFR 1.97(e), as checked below, or [] a \$180.00 fee under 37 CFR 1.17(p), or (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first) [] under 37 CFR 1.97(d) together with: [] a Statement under 37 CFR 1.97(e), as checked below, and [] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee) [] under 37 CFR 1.97(i): | 511. | |
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| (Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the nation stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, inclu CPA, or a Request for Continued Examination). [] under 37 CFR 1.97(c) together with either: [] a Statement under 37 CFR 1.97(e), as checked below, or [] a \$180.00 fee under 37 CFR 1.17(p), or (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first) [] under 37 CFR 1.97(d) together with: [] a Statement under 37 CFR 1.97(e), as checked below, and [] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee) [] under 37 CFR 1.97(i): | This I | under 37 CFR 1.129(a), or |
| [] a Statement under 37 CFR 1.97(e), as checked below, or [] a \$180.00 fee under 37 CFR 1.17(p), or (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first) [] under 37 CFR 1.97(d) together with: [] a Statement under 37 CFR 1.97(e), as checked below, and [] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee) [] under 37 CFR 1.97(i): | [X] | (Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including |
| (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first) [] under 37 CFR 1.97(d) together with: [] a Statement under 37 CFR 1.97(e), as checked below, and [] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee) [] under 37 CFR 1.97(i): | [] | [] a Statement under 37 CFR 1.97(e), as checked below, or |
| [] a \$180.00 fee under 37 CFR 1.17(p), or (Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee) [] under 37 CFR 1.97(i): | [] | (After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first) |
| | | [] a \$180.00 fee under 37 CFR 1.17(p), or |
| (Filed after payment of issue fee) | | Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper. |

| State | ement Un | der 37 (| CFR 1.97(e) |
|-------|-------------------------|--|--|
| [] | any co | mmuni | information contained in this Information Disclosure Statement was first cited in cation from a foreign patent office in a counterpart foreign application not more on the filing of this Information Disclosure Statement; or |
| [] | comm knowl in the | unication of the contract of t | formation contained in this Information Disclosure Statement was cited in a confrom a foreign patent office in a counterpart foreign application, and, to the the undersigned, after making reasonable inquiry, no item of information contained ation disclosure statement was known to any individual designated in 37 CFR than three months prior to the filing of this Information Disclosure Statement. |
| State | ement Un | der 37 (| CFR 1.704(d) (Patent Term Adjustment) Applies to original applications (other than design) filed on or after May 29, 2000 |
| [] | comm was no | unication tracei | information contained in the Information Disclosure Statement was cited in a on from a foreign patent office in a counterpart application and this communication ved by any individual designated in § 1.56(c) more than thirty days prior to the information Disclosure Statement. |
| [X] | Enclo | sed here | ewith is form PTO-1449: |
| | [X] | Copie | s of the cited references are enclosed. |
| | | [X] | Since this application was filed after June 30, 2003, copies of issued U.S. patents and published U.S. applications are not required and are not being provided. |
| | [] | Appli | es of the cited references are enclosed except those entered in prior application, U.S. cation No. [], to which priority under 35 U.S.C. 120 is claimed. [The earlier eation contains copies of the cited references.] |
| | [] | The li | sted references were cited in the enclosed International Search Report in a erpart foreign application. |
| | [] | The "ounder | concise explanation" requirement (non-English references) for reference(s) [37 CFR 1.98(a)(3) is satisfied by: |
| | | [] | the explanation provided on the attached sheet. |
| | | [] | the explanation provided in the Specification. |
| | | [] | submission of the enclosed International Search Report. |
| | | [] | submission of the enclosed English-language version of a foreign Search Report and/or foreign Office Action. |
| | | [] | the enclosed English language abstract. |

| [] | A | pplic | ant requests that the following n | on-published pending applic | cations be considered: |
|------------------------|------------|----------------|---|--|---|
| Examiner's Initials | | | | | |
| | | | U.S. Patent Application No. [|], by [inventor(s)], filed [|], Docket No.: [] |
| | | | U.S. Patent Application No. [|], by [inventor(s)], filed [|], Docket No.: [] |
| | | | U.S. Patent Application No. [|], by [inventor(s)], filed [|], Docket No.: [] |
| | | | Examiner | Date | _ |
| | [|] | A copy of each above-cited app | olication, including the curre | nt claims, is enclosed. |
| | [|] | A copy of each above-cited app those entered in prior application 35 U.S.C. 120 is claimed. | olication, including the curre on, U.S. Application No. [| nt claims, is enclosed, except], to which priority under |
| The E | xar nce | niner s we | r is requested to return a copy of re considered with the next offic | the above list of pending appear communication. | plications indicating which |
| It is re | qu | ested | that the information disclosed h | nerein be made of record in the | nis application. |
| Metho | d d | of pay | yment: | | |
| [] | | | ck for the fee noted above is enc panying Reply. A copy of this S | | cluded in the check with the |
| [] | | lease nclos | charge Deposit Account 08-038 ed. | 30 in the amount of \$[| . A copy of this Statement is |
| [X] | P | lease | charge any deficiency in fees ar | nd credit any overpayment to | Deposit Account 08-0380. |
| | | | F | Respectfully submitted, | |
| | | | F | HAMILTON, BROOK, SMI | TH & REYNOLDS, P.C. |
| | | | F | Ralph Trementozzi Registration No.: 55,686 Telephone: (978) 341-0036 | entry |
| | | | | Facsimile: (978) 341-0136 | |

Concord, MA 01742-9133 Dated: August 4, 2004

| • | | | | Sheet i | |
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| PTO-1449 REPRODUCED | ATTORNEY DOCKET NO. 3226.1021-001 | | LICATION NO. 713,562 | | |
| INFORMATION DISCLOSURE CHATIONS IN AN APPLICATION | FIRST NAMED INVENTOR Kanu Chadha | | FILING DATE November | 14, 2003 | |
| August 4, 2004 AUG 0 6 2004 (Use several sheets if necessary) | EXAMINER Not Assigned | CONFI 8238 | RMATION NO. | GROUP 2661 | |
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| | | U.S | S. PATENT DOCUMENTS | |
| EXAM- INER INI- TIAL | REF. NO. | DOCUMENT NUMBER Number-Kind Code (if known) | ISSUE DATE / PUBLICATION DATE MM-DD-YYYY | NAME OF PATENTEE OR APPLICANT OF CITED DOCUMENT |
| | AA | 5,206,886 | 04-27-1993 | Bingham |
| | AB | 5,228,062 | 07-13-1993 | Bingham |
| | AC | 6,628,735 B1 | 09-30-2003 | Belotserkovsky, et al. |
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| PTO-1449 REPRODUCED | ATTORNEY DOCKET NO. 3226.1021-001 | | CATION NO. 13,562 | |
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| August 4, 2004 AUG 0 6 2004 (Use several sheets if necessary) | EXAMINER Not Assigned | CONFIRM 8238 | MATION NO. | GROUP 2661 |

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| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | |
| AR | Abhayawardhana, V.S., and Wassell, I.J., "Residual Frequency Offset Correction for Coherently Modulated OFDM Systems in Wireless Communication," IEEE Vehicular Technology Conference (VTC), no. 2, Spring 2002, May 2002, pp. 777-781. | | | |
| AS | Abhayawardhana, V.S., and Wassell, I.J., "Common Phase Error Correction with Feedback for OFDM in Wireless Communication," GLOBECOM 2002 - IEEE Global Telecommunications Conference, No. 1, November 2002, pp. 660-664. | | | |
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